Stephen Cauffman

From: wtc@nist.gov
Sent: Tuesday, September 09, 2008 3:02 PM
To: Stephen Cauffman
Subject: Fwd: Final Report on Collapse of WTC 7
Attachments: letter to nist.doc

>X-Sieve: CMU Sieve 2.3
>To: NIST <wtc@nist.gov>
>From: mark phillips <mrppy@fix.net>
>Subject: Final Report on Collapse of WTC 7
>Date: Mon, 8 Sep 2008 09:20:54 -0700
>X-Mailer: Apple Mail (2.753.1)
>X-Proofpoint-Virus-Version: vendor=fsecure
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>X-NIST-MailScanner-Information:
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>Mr. Stephen Cauffman,
>
>Attached are my questions and comments regarding the presentation by
>Dr. Shyam Sunder regarding NIST NCSTAR 1A, Final Report on the Collapse
>of World Trade Center Building 7.
>
>This letter is also being sent to you via certified mail.
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>Please advise when and in what form i will receive answers to my
>questions and comments.
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>thank you,
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>mark phillips
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>Content-Disposition: attachment;
> filename="letter to nist.doc"

To: September 8, 2008

WTC Technical Information Repository
Attn: Mr. Stephen Cauffman
National Institute of Standards and Technology
100 Bureau Drive Stop 8611
Gathersburg, Md., 20899-8611

(Via e-mail and certified letter)

Mr. Cauffman,

The following comments and questions refer to the August 26, 2008 technical presentation by Dr. Shyam Sunder and the report, NIST NCSTAR 1A, Final Report on the Collapse of World Trade Center Building 7

1) During the first round of questions of the technical presentation by Dr. Sunder (at 1:01:45 into the presentation) the following question was asked by David Chandler of the American Association of Physics Teachers:

"Any number of competent measurements using a variety of methods indicate the northwest corner of WTC 7 fell with an acceleration within a few percent of the acceleration of gravity. Yet your report contradicts this, claiming 40% slower than the free fall based on a single data point. How can such a public, visible, easily measurable quantity be set aside?"

Dr. Sunder replies:

"Could you repeat the question?"

[*The question is repeated, leaving out the word, "competent" as well as the last sentence*]

"Well...um...the...first of all gravity...um...gravity is the loading function that applies to the structure...um...at...um...applies....to every body...every...uh...on...all bodies on...ah...on...um... this particular...on this planet not just...um...uh...in ground zero...um...the...uh...the analysis shows a difference in time between a free fall time, a free fall time would be an object that has no...uh... structural components below it. And if you look at the analysis of the video it shows that the time it takes for the...17...uh...for the roof line of the video to collapse down the 17 floors that you can actually see in the video below which you can't see anything in the video is about...uh... 3.9 seconds. What the analysis shows...and...uh...the structural analysis shows, the collapse analysis shows that same time that it took for the structural **model** [*emphasis in original*] to come down from the roof line all the way for those 17 floors to disappear is...um... 5.4 seconds. It's...uh..., about one point...uh...five seconds or roughly 40% more time for that free fall to happen. And that is not at all unusual because there was

[*emphasis in original*] structural resistance that was provided in this particular case. And you had…you had a sequence of structural failures that had to take place and everything was not instantaneous."

It seems surprising that Dr. Sunder apparently had such difficulty in answering this straightforward question. In the end, this answer by Dr. Sunder is very confusing. Dr. Sunder states that analysis of the video shows that the time it takes for the roof line to collapse 17 floors is 3.9 seconds, which, according to the report, would be equal to that of free fall. But he states that the model collapse time is 5.4 seconds.

However, the report itself contradicts Dr. Sunder's statement. In section 3.6, "Collapse Time" pages 40-41 the report states that analysis of the video shows the time for this same collapse to be 5.4 seconds and that this is 40% longer than 3.9 seconds, the value one would obtain assuming free-fall.

So, which are we to believe? What Dr. Sunder said or what is written in the report?

If the former, then clearly the report is in error and it must be corrected. In addition, a response is required to explain why the model does not agree with observed reality.

If the latter, then an answer to Mr. Chandler's question is still required. NIST should show the public (who paid for the investigation) exactly how the rate of acceleration was measured, and plot the speed vs. time curve of this measurement. This must be done in order to see the instantaneous acceleration, which is of utmost importance, rather than the average acceleration, which may obscure important, even crucial, information. Mr. Chandler has performed this analysis and made it available for anyone to critique (http://www.youtube.com/watch?v=gC44L0-2zL8). In his analysis, he shows that for about 2.5 seconds, the roofline of WTC 7 fell with an acceleration that is indistinguishable from free-fall. Calculating an average acceleration that might include periods of time before and/or after this period of free fall would result in a lower average rate of acceleration and perhaps explains the discrepancy between his results and those reported by NIST. It would seem imperative that NIST show Mr. Chandler's analysis to be in error since any period of constant acceleration equal to free-fall would immediately imply that the thousands of tons of structural steel and concrete below the roofline provided exactly zero resistance. This would clearly be impossible (as Dr. Sunder implies) and would mean the official theory advanced by NIST is incorrect. An acceleration equal to free-fall would be consistent, however, with a controlled demolition.

The calculation of the velocity vs. time graph and derivation of a valid numerical estimate of the instantaneous acceleration throughout the time of fall is so straightforward that it is inconceivable that NIST would settle for two data points and an a priori assumption of uniform acceleration, unless the intention is to cover up what went on in between. Mr. Chandler is correct in asserting that it is the instantaneous acceleration throughout the fall, rather than an average acceleration, that is relevant to the dynamics of the building collapse. If NIST chooses to ignore Mr. Chandler's analysis rather than to

challenge its accuracy, the logical conclusion is that NIST is complicit in a cover up, and all the other conclusions of the report become suspect.

2) During the final round of questions at the end of the technical presentation, at least 2 questions were asked regarding the possibility of controlled demolition. Dr. Sunder stated that at the beginning of the investigation a range of possible avenues for investigation were considered and that during this initial screening process, the possibility that controlled demolition might have contributed to the collapse of WTC 7 was dismissed. This dismissal was based entirely on computer modeling without the benefit of gathering any evidence such as metallurgical analysis of the steel or the WTC dust. Dr. Sunder later describes this practice as, "scientific."

When I was taught the scientific method I learned that one must first gather evidence before drawing any conclusions. With respect to the possibility of controlled demolition it seems particularly appalling that NIST would rule this out as a possibility since there are several aspects of the collapse of all three buildings (WTC 1,2 and 7) that are consistent with controlled demolitions. For example, all 3 buildings exhibited sudden onset of collapse. They all fell straight down. All of the collapses were at near free-fall speed. All of the collapses were total. All of the collapses produced pulverized concrete and large dust clouds. Horizontal ejections were observed before and during all of the collapses. All of these characteristics would have been known to NIST by the start of its investigation with little or no effort on the part of NIST.

Given that, it seems appalling that NIST would declare investigation of controlled demolition off limits. What, exactly, is the down side of investigating the steel and dust, for example. Even if you found nothing of interest in such an examination, would it not help to put to rest the numerous questions regarding the possibility of controlled demolition?

3) What is NIST's explanation for the molten steel that was observed during the clean up efforts? The evidence for this molten steel is overwhelming and cannot in good faith be disputed. For example, here is a link to an object called the "meteorite" that was found in the rubble.

http://www.whatreallyhappened.com/IMAGES/wtc_meteorite.wmv

There are also numerous reports of molten steel from the firefighters and others involved in the clean up efforts. For example, it is reported that Leslie Robertson, structural engineer involved in the design of the twin towers, stated, "As of 21 days after the attack, the fires were still burning and molten steel was still running." Also there are at least 3 papers (2 published and one on line) that report iron rich molten spheres in the WTC dust. It is claimed that these could only result from temperatures high enough to melt steel (2800°F), which is beyond the range of the WTC fires.

[1]RJ Lee Group, WTC Dust Signature Report, December 2003

[2]Heather A. Lowers and Gregory P. Meeker, Particle Atlas of World Trade Center Dust
[3]Steven E. Jones (et. al.) Extremely High Temperatures during the World Trade Center Destruction, Journal of 9/11 Studies or at:
http://www.journalof911studies.com/articles/WTCHighTemp2.pdf

4) My last question is related to transparency. Will NIST engage in an open and public discussion with experts from architecture, engineering and physics to answer the questions that are not satisfactorily addressed in your report?

Clearly NIST can continue to ignore the possibility of controlled demolition. But to do so in the face of so much evidence to the contrary will only further erode the public's confidence in NIST. Only your clear and resolute pursuit of the truth, regardless as to where that truth might lead, can stem the ever-increasing tide of cynicism that currently erodes our democracy.

Sincerely,

Mark Phillips B.S.M.E., P.E. (retired)
Atascadero, Ca.